



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/572,857

11/21/2006

Takchiko Yamashita

043887-0192

9389

53080 7590 11/26/2007
MCDERMOTT WILL & EMERY LLP
600 13TH STREET, NW
WASHINGTON, DC 20005-3096

EXAMINER

LISTVOYB, GREGORY

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

11/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/572,857

Applicant(s)

YAMASHITA ET AL.

Examiner

Gregory Listvoyb

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/25/07 and 11/21/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: 3/22/06 and 7/24/07 IDS.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8-10, 13-15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The meaning of the word "based" is not clear in the context of the above claims. For instance, meaning the fragment of "plant-based resin" may be interpreted as a substance, having cells from a plant. The fragment "phosphorus-based", "halogen-based" or "silicon-based" may imply wide varieties of structures having different amount of the above elements. Therefore, the language of the Claims should be more specific.

Claim 9 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The meaning of the following sentence "The resin composition according to claim 8, which comprises, as the resin component, at least one resin of polylactic acid, a lactic acid copolymer and polybutylene succinate" is unclear. It can be interpreted in two ways:

1. the resin composition has all the resins listed;

Art Unit: 1796

or

2. the resin composition has only one polymer from the group of of polylactic acid, a lactic acid copolymer and polybutylene succinate.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-10, 13-15 rejected under 35 U.S.C. 102(b) as being anticipated by Mohanty et al (US 2003/0216496) herein Mohanty or Ohme et al (US 2004/024803) herein Ohme.

Mohanty discloses a resin composition comprising polylactic acid (Abstract) or lactic acid copolymer (see line 0023), and a flame retardancy-imparting component (see line 0054), meeting the limitations of Claims 8 and 9.

Regarding Claim 10, Mohanty discloses Phosphorous compounds and various inorganic compounds as flame retardants.

Art Unit: 1796

In reference to Claims 13-15, Mohanty teaches melt-kneading process using of the above system (see line 0113), with following compression molding of the composition (see line 0115) and producing a molded article.

Ohme teaches polylactic discloses a resin composition comprising polylactic acid (Abstract), polybutylene succinate (see line 0091) and a bromine or phosphorus containing flame retardancy-imparting component (see line 0173).

Ohme teaches melt-kneading process using of the above system (see line 0018), with following compression molding of the composition (see Abstract and line 0018) and producing a molded article.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Mohanty or Ohme in combination with Dorfman et al (US 3983185) herein Dorfman.

Art Unit: 1796

Mohanty or Ohme disclose a resin composition comprising polylactic acid or its copolymer or composition, containing polybutylene succinate and a flame retardancy-imparting component. (see discussion above).

Mohanty or Ohme do not disclose the flame retardancy-imparting component is acetylacetonatoiron or acetylacetonatocopper.

Dorfman disclose a composition comprising a polyester and flame retardants, which are acetylacetonatoiron (see Column 9, line 65) or acetylacetonatocopper (see Column 10, line 35).

Dorfman teaches that the above flame retardants have an advantage over regular ones (i.e. phosphorus-based), since they retain translucency of the polymer composition (see Column 9, line 5).

Therefore, it would have been obvious to a person of ordinary skills in the art to use acetylacetonatoiron or acetylacetonatocopper instead of traditional flame retardants in the cases, where retaining translucency of an article is important.

In addition, it is a prima facie obvious to add a known ingredient for its known function (see *In re Linder* 173 USPQ 356).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory Listvoyb whose telephone number is (571) 272-6105. The examiner can normally be reached on 10am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gregory Listvoyb
Examiner
Art Unit 1796

GL


**RABON SERGENT
PRIMARY EXAMINER**